



Five-Year Review Report
for
Northern Engraving Corporation

Sparta, Wisconsin

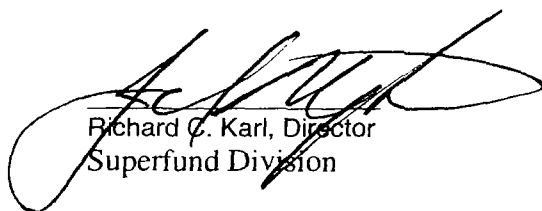
August, 2005

PREPARED BY:

**Wisconsin DNR for
U.S. EPA Region 5**

Approved by:

Date:


Richard C. Karl, Director
Superfund Division

8/2/05

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Figure 1 – Site Location and Layout

Attachment 1 – Deed Affidavit

Attachment 2 – Inspection Form and Photographs

Attachment 3 – NEC Inspection Log

List of Acronyms

| | |
|-----------|---|
| ACL | Alternative Concentration Limit |
| ARAR | Applicable or Relevant and Appropriate Requirement |
| CD | Consent Decree |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| EPA | United States Environmental Protection Agency |
| CFR | Code of Federal Regulations |
| MCL | Maximum Contaminant Level |
| MCLG | Maximum Contaminant Level Goal |
| NEC | Northern Engraving Corporation Superfund Site |
| NCP | National Contingency Plan |
| NPL | National Priorities List |
| O&M | Operation and Maintenance |
| PRP or RP | Potentially Responsible Party |
| RA | Remedial Action |
| RD | Remedial Design |
| RI/FS | Remedial Investigation/Feasibility Study |
| ROD | Record of Decision |
| SDWA | Safe Drinking Water Act |
| VOC | Volatile Organic Compound |
| WDNR | Wisconsin Department of Natural Resources |

Executive Summary

The remedy for the Northern Engraving Superfund site included excavation, consolidation, stabilization and capping of contaminated soils and sludges on site, institutional controls, and monitoring of contaminated groundwater. Groundwater remedial goals were subsequently met and groundwater monitoring discontinued in 2000. The site was deleted from the NPL in 1997.

The assessment of this five-year review found that the remedy is functioning as designed. The remedy is protective of human health and the environment. All threats at the site have been addressed through stabilization and capping of contaminated soil and sludges, the installation of fencing and the implementation of an institutional control.

The following recommendations are made to improve the protectiveness of the remedy:

- It was noted that the fence inspection was not listed as an item on the inspection log and it is recommended that it be added to the log in the future.
- The current deed affidavit may not be as effective as a deed restriction. Therefore, it is recommended that a more effective control, in the form of a deed restriction, be filed. This instrument outlines what activities, such as cap disturbance and excavation or excavation in the seepage pit area, are prohibited. WDNR has guidance on the preparation of deed restrictions that may be followed in the document "Case Close Out and the requirements for Institutional controls and VPLE Insurance", PUBL-RR-606 <http://dnr.wi.gov/org/aw/rr/archives/pubs/RR606.pdf>). WDNR and EPA will work with the PRP to implement this recommendation within six months.

Five-Year Review Summary Form

| SITE IDENTIFICATION | | |
|---|---|-----------------------------------|
| Site name (from WasteLAN): Northern Engraving Corporation Superfund Site | | |
| EPA ID (from WasteLAN): WID006183826 | | |
| Region: 5 | State: WI | City/County: Sparta/Monroe |
| SITE STATUS | | |
| NPL status: <input type="checkbox"/> Final <input checked="" type="checkbox"/> Deleted <input type="checkbox"/> Other (specify) | | |
| Remediation status (choose all that apply): <input type="checkbox"/> Under Construction <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Complete | | |
| Multiple OUs?* <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | Construction completion date: <u>9 / 29 / 1989</u> | |
| Has site been put into reuse? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | |
| REVIEW STATUS | | |
| Lead agency: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> State <input type="checkbox"/> Tribe <input type="checkbox"/> Other Federal Agency | | |
| Author name: Gary A. Edelstein, P.E. | | |
| Author title: Remedial Engineer | Author affiliation: Wisconsin DNR, completed for U.S. EPA under a CA | |
| Review period:** <u>2 / 1 / 2005</u> to <u>6 / 30 / 2005</u> | | |
| Date(s) of site inspection: <u>4 / 11 / 2005</u> | | |
| Type of review: <div style="text-align: right;"> <input checked="" type="checkbox"/> Post-SARA <input type="checkbox"/> Pre-SARA <input type="checkbox"/> NPL-Removal only <input type="checkbox"/> Non-NPL Remedial Action Site <input type="checkbox"/> NPL State/Tribe-lead <input type="checkbox"/> Regional Discretion) </div> | | |
| Review number: <input type="checkbox"/> 1 (first) <input checked="" type="checkbox"/> 2 (second) <input type="checkbox"/> 3 (third) <input type="checkbox"/> Other (specify) | | |
| Triggering action: <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Actual RA On-site Construction at OU # ____ <input type="checkbox"/> Construction Completion <input type="checkbox"/> Other (specify) </div> <div> <input type="checkbox"/> Actual RA Start at OU# <u>NA</u> <input checked="" type="checkbox"/> Previous Five-Year Review Report </div> </div> | | |
| Triggering action date (from WasteLAN): <u>9 / 12 / 2000</u> | | |
| Due date (five years after triggering action date): <u>9 / 12 / 2005</u> | | |

* ["OU" refers to operable unit.]

** [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

Five-Year Review Summary Form, cont'd.

Issues:

A somewhat minor issue is the exclusion of fence inspection information from the on-site maintained inspection logs.

The deed affidavit may not be as effective as a deed restriction.

Recommendations and Follow-up Actions:

It is recommended that the fence inspection information be added to the inspection logs.

It is recommended that a deed restriction be filed for the site.

Protectiveness Statement(s):

The remedy continues to be protective of human health and the environment.

**Northern Engraving Corporation Superfund Site
Sparta, Wisconsin
Second Five-Year Review Report**

I. Introduction

The purpose of the five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and identify recommendations to address them.

The Agency is preparing this Five-Year Review report pursuant to CERCLA §121 and the National Contingency Plan (NCP). CERCLA §121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The Agency interpreted this requirement further in the NCP; 40 CFR §300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

The Wisconsin DNR conducted the five-year review of the remedy implemented at the Northern Engraving Corporation Superfund Site (NEC) in Sparta, Wisconsin for the United States Environmental Protection Agency (EPA), Region 5. This report documents the results of the review.

The triggering action for this statutory review is the completion of the last review on September 12, 2000. A five-year review wasn't completed in 1995, but one was completed in 2000, so this is the second five-year review for the site. The five-year review is required due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure.

II. Site Chronology

Table 1 - Chronology of Site Events

| Event | Date |
|---|-------------|
| Lagoon and seepage pit management of wastes | 1968 - 1976 |
| Above ground treatment system installed | 1976 |
| Final listing on EPA National Priorities List | 9/1984 |
| Administrative order for responsible party performance of RI/FS and remedy completed | 9/10/85 |
| Remedial Investigation/Feasibility Study (RI/FS) completed by RP released to public for comment | 8/27/87 |
| ROD selecting the remedy is signed | 9/28/87 |
| Start of on-site construction for selected remedy | 6/6/88 |
| Completion of closeout report for on-site construction for selected remedy | 9/29/89 |
| Deletion from NPL | 10/29/1997 |
| Groundwater monitoring discontinued | 11/2000 |
| First Five-Year Review by EPA | 9/12/00 |

III. Background

Physical Characteristics

The NEC site is located in Sparta, Wisconsin, at 803 South Black River Street (Figure 1). Sparta is a rural community with a population of 6,800 approximately 25 miles east of La Crosse. The NEC facility is adjacent to residential and business areas and abuts the La Crosse River which forms the southern boundary of the site. Domestic water is supplied to most residences in the city through a public distribution system. Production wells for this system are about 3/4 mile from the site and draw water from a bedrock aquifer at depths from 105 to 260 feet. The closest private well is located approximately 1/4 mile from the NEC facility. Private wells are completed in the bedrock aquifer.

The site is presently the location of NEC manufacturing activities. NEC produces metal name plates, dials, and decorative trim for the automotive industry utilizing anodizing, chemical etching, and chromate conversion coating processes. The site was placed on the National Priorities List September 21, 1984 (Federal Register number 185, volume 49 and page numbers 37070-37090) because of the potential for soil, groundwater, and surface water contamination due to past waste water treatment and disposal practices employed at the site.

History of Contamination

Four areas on the NEC facility were identified as potential sources of contamination. These areas include a sludge lagoon, a seepage pit, a sludge dump site, and a lagoon drainage ditch. From 1968 to 1976 rinse waters from the plant, after treatment with sodium hydroxide were discharged to the lagoon where metal hydroxide solids were allowed to settle before discharge of the effluent via the drainage ditch to a storm run off ditch where it combined with the City of Sparta's wastewater effluent prior to discharge into the La Crosse River. Accumulated sludge in the lagoon was on two occasions excavated and disposed of on-site at what is referred to as the sludge dump. The seepage pit was used to neutralize spent acid waste by reaction with limestone.

A waste water treatment system was installed in 1976 which uses above ground steel settling tanks. Waste previously treated in the settling lagoon and in the seepage pit were combined and routed to the treatment system. The lagoon was used for emergency storage of untreated waste water until 1980 when a lined emergency holding lagoon was put into service. In 1981 the seepage pit was filled, graded, and revegetated.

Field investigation tasks described in the March 1985, Remedial Investigation/Feasibility Study (RI/FS) Work Plan (W/P) identified areas within the NEC facility where hazardous constituents posed a potential threat to public health, welfare, and the environment. This W/P was developed under an Administrative Consent Order signed September 10, 1985 in which NEC agreed to perform the RI/FS and to implement the recommended remedy for the site.

Analysis of on-site groundwater showed elevated levels of copper, fluoride, nickel, zinc, 1,1-dichloroethylene, trichloroethylene, and vinyl chloride. Data indicated that the contaminants moved with the groundwater toward the La Crosse River where the groundwater discharges to the river at the southern boundary of the site. Highest levels of these indicator parameters were detected down gradient from and adjacent to the sludge lagoon and the seepage pit. Organic chemicals were typically below 100 parts per billion (ppb) except for trichloroethylene which was detected at levels as high as 670 ppb.

Surface soils were not contaminated except in the immediate vicinity of the drainage ditch. Soil samples collected below the sludge lagoon, sludge dump site, and seepage pit showed elevated levels of one or more of the above mentioned inorganic indicator parameters. In addition, both the sludge lagoon and the sludge dump site contained quantities of metal hydroxide sludge. The May 1986, Remedial Investigation (RI) Report may be consulted for a complete summary of the results of the site study.

IV. Remedial Actions

Remedy Selection

The August 1987, Feasibility Study (FS), released for public comment August 27, 1987, developed and evaluated an array of remedial alternatives for each discrete waste unit on site. The FS identified remedial alternatives which provide minimization of long-term contact with contaminated soil and sludge, and prevent ingestion of contaminated groundwater.

On September 28, 1987, the Regional Administrator approved a Record of Decision (ROD) which selected the following remedial action at each of the designated areas on the NEC facility.

Source Control

1. Sludge Lagoon: contaminated sludges and soils in the sludge lagoon to be solidified, and a RCRA cover installed atop the lagoon to minimize leaching of contaminants into groundwater and reduce health risks related to direct contact with the sludges and soils.
2. Drainage Ditch: contaminated soil in the drainage ditch to be excavated and solidified in the sludge lagoon to minimize health risks associated with direct contact with the soil.
3. Seepage Pit: The PRPs will develop and implement deed restrictions at the seepage pit to minimize the potential of direct contact with contaminated soils. Long-term groundwater monitoring will be instituted to track changes in groundwater quality relative to RCRA groundwater protection standards.
4. Sludge Dump Site: Contaminated sludges and soils in the sludge dump site will be excavated and solidified in the sludge lagoon effectively minimizing the migration of contaminants into the groundwater and any risks associated with direct contact with the sludges and soil.

The ROD performance standard for the excavation of sludges and soil at the sludge dump site and excavation of soil at the drainage ditch was background or method detection limits for the indicator compounds for the remedial action to meet the RCRA clean closure requirements.

Management of Migration

Site groundwater monitoring and surface water protection are managed through use of alternate concentration limits (ACLs) as groundwater performance standards. The use of ACLs at the NEC site meet the intent of RCRA groundwater requirements and the criteria established in SARA. There are known and projected points of entry of contaminated groundwater into surface water. The ACLs were determined to be:

| | | |
|--------------------|--------|------|
| Fluoride: | 14,800 | µg/l |
| Copper: | 1,000 | µg/l |
| Nickel: | 644 | µg/l |
| Zinc: | 5,000 | µg/l |
| Trichloroethylene: | 40 | µg/l |
| Vinyl Chloride: | 10 | µg/l |

The concentrations for the indicator contaminants remained below the ACLs during the second five year monitoring period indicating that the remedy implemented at the NEC site remains protective of human health and the environment.

Remedy Implementation

Excavation of the combined soil and sludge at the dump site started June 6, 1988. Visual observation for the presence of sludge and impacted soil was used to define the initial limits of the excavation. The Remedial Design called for the excavation of approximately 900 cubic yards of material. Cleanup levels were not reached in all areas of the excavated sludge dump site following the initial excavation. Performance sampling showed that cleanup standards were exceeded along the east and north side walls and on the bottom of the excavation. Excavation of an additional 400 to 500 cubic yards of soil from these areas was required. The practical lateral limit of the additional excavation was defined by the foundations of currently existing structures which were threatened by the excavation. Copper and nickel levels in this area adjacent to the on-site structures still exceeded the proposed cleanup levels. All soil removed from the sludge dump site was moved to the sludge lagoon for stabilization. The excavated area was backfilled with native soil to the original grade and vegetative cover was provided.

The remedial action at the drainage ditch required excavating the area of the ditch to a depth of two to three feet and stabilization of the excavated material in the sludge lagoon. During the initial excavation approximately 50 feet of ditch was excavated between the sludge lagoon and the storm runoff ditch. Two to three feet of soil was removed as determined by the depth to the groundwater. The width established during the excavation ranged from 10 feet adjacent to the sludge lagoon to about four feet at the confluence with the storm runoff ditch. About 25 cubic yards of soil were removed.

Post-excavation sampling results showed that the indicator parameters in the drainage ditch side wall samples exceed the proposed cleanup levels. Excavation of an additional 25 cubic yards extended the area to a width ranging from 18 to 20 feet for the entire length of the drainage ditch. Although significant reductions in the level of contamination were observed, concentrations still exceeded the target levels. In response, an additional 18 cubic yards of soil were excavated from the area which showed the highest concentrations. A total of 68 cubic yards of soil were excavated from the drainage ditch area.

Cumulative hazard indexes have been calculated to define the risk due to exposure through ingestion of soil contaminated at these residual concentration levels. Cumulative indexes determined using appropriate data are below the maximum criteria and are considered protective of human health.

Future land development restrictions will be developed within six months of this Report for the seepage pit area. A new affidavit (Attachment 1) shall be filed with the Monroe County Register of Deeds office indicating the location of the seepage pit area and calling to attention that waste disposal activities have taken place at this location and giving all activities of what the seepage pit area shall be use for.

Sludge Lagoon stabilization was achieved by the addition of lime to the sludge. Lime was added to the sludge and soil in the lagoon and mixed in place. Approximately 3150 cubic yards of combined sludge and soil were stabilized using 511 tons of lime. The lagoon stabilization was completed July 12, 1988.

Toxicity test results on samples of stabilized lagoon material show that the stabilized sludge meets the remedial objective of minimizing the leachability of the contaminants of concern. All extract results met the toxicity criteria performance standard established in the remedial design.

Unconfined compressive strength of the stabilized material was determined to be less than the design objective of 25 psi. It was reasoned that the low unconfined compressive strength of the material may be due to sheer failure along planes of sandy or organic peat lenses for which this test is not appropriate. In order to ensure adequate support for construction of the clay cap an engineered subgrade was installed which consisted of a geotextile and 12 inches of aggregate. The cap was then installed as designed to meet the requirements in 40 CFR §264.210.

System Operation/Operation and Maintenance/Groundwater Standards Compliance

The first round of baseline groundwater quality samples was collected on July 12, 1988. Samples were analyzed for trichloroethylene, vinyl chloride, 1,1-dichloroethylene, copper, nickel, zinc, and fluoride. In all rounds of sampling the concentrations for the indicator contaminants remain below the clean-up levels.

In May of 1997, the Wisconsin Department of Natural Resources (WDNR) entered into a Consent Order with Northern Engraving. This Consent Order required Northern Engraving to continue groundwater monitoring using a lower detection limit. This was necessary because previous monitoring was performed using detection limits that exceeded the groundwater standards found in chapter NR 140, Wisconsin Administrative Code. Based on the monitoring results, WDNR determined that no additional monitoring was required at this site. WDNR closed out the Consent Order and the monitoring wells near the Superfund Site areas were abandoned in November, 2000. There is currently no groundwater monitoring at the site associated with the Superfund site.

NEC maintains and inspects annually the cap, sludge lagoon, drainage ditch, the seepage pit, the sludge dump site areas, and fence.

There has been no erosion or settlement of the cap system. The only maintenance required is regular mowing. The areas of concern have maintained a very healthy grass cover during the post remedial period.

V. Progress since the Last Five-Year Review

The 2000 five-year review recommended that:

- The caps to the drain system clean-outs be repaired so that they are again readily accessible and water tight; and
- The mole holes in the cover be stamped back down and seeded as necessary.

The April, 2005 inspection, documented below, found that these recommendations had apparently been carried out and these problems weren't noted.

VI. Five-Year Review Process

Administrative Components

The site Five-Year Review was led by Gary Edelstein of WDNR, with assistance from Gladys Beard of EPA, Remedial Project Manager (RPM) for the NEC site. Susan Pastor of EPA led the community involvement effort.

The review components include:

- Community Involvement;
- Document Review;
- Data Review;
- Site Inspection;
- Local Interviews; and
- Five-Year Review Report Development and Review.

Community Involvement

On February 25, 2005, a notice was published in the local newspaper, the Sparta Herald that a five-year review was to be conducted.

It is planned that around August 30, 2005, a notice will be published the in same local newspaper that announces the completion of the Five-Year Review report for the NEC site. The results of the review and the report are available to the public at the Sparta Free Library and the EPA Region 5 office, as well as in the EPA's web site:

http://www.epa.gov/region5/superfund/fiveyear/fr_index.html

Document Review

This five-year review consisted of a review of relevant documents including O&M records, ROD, Site Close-out Report and the last Five-Year Review.

Site Inspection and Institutional Controls

An inspection was conducted by the State on April 11, 2005 (See Attachment 2, which is the handwritten inspection form, photo key diagram and 16 photographs). The purpose of the inspection was to assess the protectiveness of the remedy, including the presence of fencing to restrict access and the integrity of the cap.

No significant issues have been identified at any time regarding the cap, the drainage structures, or the fence. Examination of the cap revealed that grass was in good condition. The cap and the surrounding area were undisturbed.

The inspection logs were examined (See Attachment 3). It was noted that the fence inspection was not listed as an inspection item and it is recommend that it be added to the log in the future.

The institutional control in place is a deed affidavit that describes the location of the site and references the Consent Order (Attachment 1). This document should help prevent excavation activities, disturbance of the cap, and any other activities or actions that might interfere with the implemented remedy, because it provides some notice that the remedy was conducted. However, it may not be as effective as other institutional controls, such as a deed restriction. Therefore, it is recommended that a more effective control, in the form of a deed restriction, be filed. This instrument outlines what activities, such as cap disturbance and excavation or excavation in the seepage pit area, are prohibited. WDNR has guidance on the preparation of deed restrictions that may be followed in the document "Case Close Out and the requirements for Institutional controls and VPLE Insurance", PUBL-RR-606 (<http://dnr.wi.gov/org/aw/rr/archives/pubs/RR606.pdf>).

Interviews

Mr. Darrell Zietlow, Water Quality Manager and the person responsible for site O&M was interviewed at the site inspection. He confirmed that the attached deed affidavit was the only

instrument filed for the site and no deed restrictions that specifically prohibit certain unacceptable activities have been filed.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents and the results of the site inspection indicate that the remedy is functioning as intended by the ROD. The stabilization and capping of contaminated soils and sludges have achieved the remedial objectives to minimize the migration of contaminants to groundwater and surface water and prevent direct contact with, or ingestion of, contaminants in soil and sediments. The effective implementation of institutional controls has prevented disturbance of the remedy.

Operation and maintenance of the cap and drainage structures have, on the whole, been effective.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy.

Federal MCLs are not stated in the ROD instead alternate concentration limits (ACLs) were applied by WDNR and were approved by U.S. EPA. The WDNR refer to the ACLs established by the WDNR as groundwater cleanup levels for the contaminants of concerns (COCs) at NEC. U.S. EPA and WDNR consider the remedy to be protective of human health and the environment.

Changes in Standards and To Be Considereds

Groundwater, surface water and soil standards have been met by the remedy. There have been no changes in these ARARs and no new standards or TBCs affecting the protectiveness of the remedy.

Changes in Exposure Pathways, Toxicity, and Other Contaminant Characteristics

The exposure assumptions used to develop the Human Health Risk Assessment included both current exposures (older child trespasser, adult trespasser) and potential future exposures (young and older future child resident, future adult resident and future adult worker). There have been no changes in the toxicity factors for the contaminants of concern that were used in the baseline risk assessment. These assumptions are considered to be conservative and reasonable in evaluating risk and developing risk-based cleanup levels. No change to these assumptions or the cleanup levels developed from them is warranted. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No ecological targets were identified during the baseline risk assessment and none were identified during the five-year review, and therefore monitoring of ecological targets is not necessary. No weather-related events have affected the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

Technical Assessment Summary

According to the data reviewed, the site inspection, and the interviews, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. All ARARs cited in the ROD have been met. There has been no changes in the toxicity factors for the contaminants of concern that were used in the baseline risk assessment, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

VIII. Issues and Recommendations and Follow-Up Actions

It was noted that the fence inspection was not listed as an inspection item and it is recommended that it be added to the log in the future.

The current deed affidavit may not be as effective as other institutional controls, such as a deed restriction. Therefore, it is recommended that a more effective control, in the form of a deed restriction, be filed. This instrument outlines what activities, such as cap disturbance, excavation or excavation in the seepage pit area, are prohibited and prohibited the ingestion of groundwater. WDNR has guidance on the preparation of deed restrictions that may be followed in the document "Case Close Out and the requirements for Institutional controls and VPLE Insurance", PUBL-RR-606 (<http://dnr.wi.gov/org/aw/rr/archives/pubs/RR606.pdf>). WDNR and EPA will work with the PRP to implement this recommendation within six months.

Recommendations and Follow-Up Actions

| No | Issue | Recommendations/ Follow-up Actions | Party Responsible | Oversight Agency | Milestone Date | Follow-up Actions: Affects Protectiveness (Y/N) | |
|----|------------------------|---|----------------------|---------------------|-------------------|---|--------|
| | | | | | | Current | Future |
| 1. | Institutional Controls | Need to finalize the institutional controls and the plan for long-term monitoring | PRPs | WDNR | 1/30/2006 | Y | Y |
| 2. | Fence inspection | Add as an inspection item | PRPs | WDNR | Ongoing | N | Y |

X. PROTECTIVENESS STATEMENT

The remedy is functioning as intended and is protective of human health and the environment in the short-term. Long-term protectiveness will be achieved once the follow-up actions and recommendations are completed.

IX. Protectiveness Statement




The remedy is protective of human health and the environment. All threats at the site have been addressed through stabilization and capping of contaminated soil and sludges, the installation of fencing and the implementation of institutional controls.

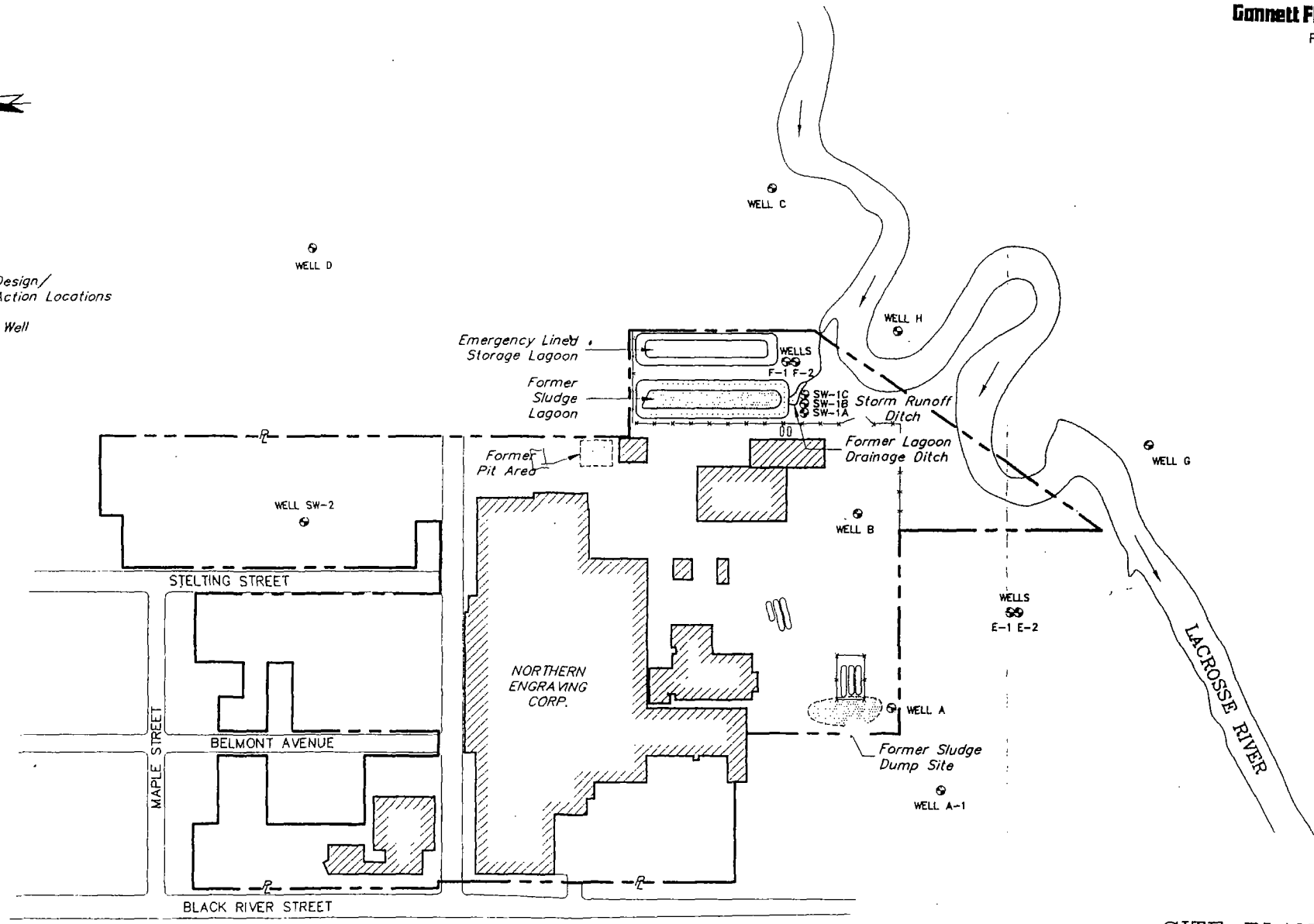
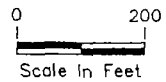
X. Next Review

The next five-year review for the Northern Engraving Corp. Superfund Site is required by August 2010, five years from the date of this review.



LEGEND

-  Remedial Design/
Remedial Action Locations
-  Monitoring Well
-  Fence



NORTHERN ENGRAVING CORPORATION

803 South Black River Street P.O. Box 377

Sparta, Wisconsin 54656

PHONE: 608-269-6911

FAX: 608-269-9547

July 26, 2000

Ms. Wendy Anderson
Wis. Dept. of Natural Resources
West Central Region Headquarters
1300 W. Clairemont Avenue
Box 4001
Eau Claire, WI 54702-4001

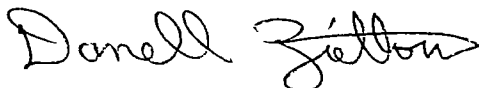
Re: Deed Attachments-Sparta Site

Dear Wendy:

As per our conversation this morning, enclosed with this letter are a copy of the old deed attachment and the new one. The reason for issuing the new one was to update section 3 to reflect the status of the site today.

The Consent Order is also filed as an attachment to the deed. I've included page 15 and 16 of the Consent Order. I highlighted the section (XI.), which I believe addresses your question about maintaining the clay cap. If you have further questions please call me at 608-269-6911.

Sincerely,



Darrell Zietlow
Northern Engraving Corp.
Environmental Management Dept.

Enc.

Cc: Bruce Corning (NEC)
Dennis Birke (DeWitt, Ross & Stevens)



Environmental Management
System Registered to
ISO 14001:1996
Certification # 67661-E1

AFFIDAVIT

Bruce L. Corning, being duly sworn, deposes and says:

1. Affiant is the Director of Environmental Management of Northern Engraving Corporation.

2. Northern Engraving Corporation is now the owner of two parcels of land located in Outlot 111, Assessor's Subdivision, City of Sparta, Monroe County, Wisconsin, more particularly described as follows:

Parcel 1: Commencing at the Northwest corner of lands as described in Vol. 235 Deeds, Page 390; thence N 89 degrees 41' 24" E along the north line of said lands a distance of 47.70 feet; thence S 0 degrees 21' 10" W a distance of 8.41 feet, being the Point of Beginning; thence N 89 degrees 41' 24" E a distance of 74.78 feet; thence S 0 degrees 21' 10" W a distance of 303.57 feet; thence S 52 degrees 50' 54" W a distance of 24.08 feet; thence N 89 degrees 06' 50" W a distance of 24.90 feet; thence N 72 degrees 10' 27" W a distance of 32.26 feet; thence N 0 degrees 21' 10" E a distance of 307.45 feet to the Point of Beginning. Containing 0.54 acres of land more or less. Subject to all easements and rights-of-way of record.

Return to:
Dennis P. Birke, Esq.
DeWitt Ross & Steven S.C.
2 East Mifflin Street, Suite 600
Madison, WI 53703

Parcel 2: Commencing at the Northwest corner of lands as described in Vol. 235 Deeds, Page 390; thence N 0 degrees 18' 36" W along the extension of the east line of Outlot 118, a distance of 26.64 feet, being the Point of Beginning; thence S 87 degrees 00' 25" W a distance of 66.44 feet; thence N 0 degrees 13' 58" W a distance of 115.28 feet; thence S 88 degrees 17' 10" E a distance of 66.26 feet to the said extension of the east line of Outlot 118; thence S 0 degrees 18' 36" E a distance of 109.83 feet to the Point of Beginning. Containing 0.17 acres of land more or less. Subject to all easements and rights-of-way of record.

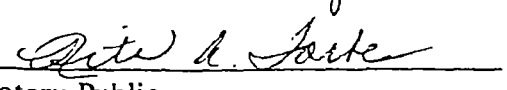
3. That the parcels were previously used for wastewater treatment and disposal operations by a metal finishing manufacturing facility. A remedial action plan to address environmental concerns has been implemented at these sites pursuant to the attached Consent Decree. The United States Environmental Protection Agency and the Wisconsin Department of Natural Resources have determined that all appropriate response actions have been implemented and that the remedial action conducted at the site remains protective of public health, welfare and the environment.

4. The purpose of this Affidavit is to make the aforementioned facts a matter of public record.

Dated this 25th day of May 2000.


Bruce L. Corning
Director of Environmental Management

Subscribed to and sworn to before me
this 25th day of May 2000.


Notary Public
My Commission _____ expires April 15, 2001

Instrument Drafted By:
Dennis P. Birke, Esq.
DeWitt Ross & Stevens S.C.

387921

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AFFIDAVIT

REGISTER' OFFICE

County of Monroe, Wis

Received for record this 27

day of Aug A.D., 1987

at 8:30 o'clock A. M.

Maya Smith Register
 6th Floor Smith
 P.O. Box 1507
 LaX

STATE OF WISCONSIN)

ss. 012

COUNTY OF MONROE)

C. E. Hughes, being duly sworn, deposes and says:

1. Affiant is the Vice President - Administration of Northern Engraving Corporation.

2. Northern Engraving Corporation is now the owner of two parcels of land located in Outlot 111, Assessor's Subdivision, City of Sparta, Monroe County, Wisconsin, more particularly described as follows:

Parcel 1: Commencing at the Northwest corner of lands as described in Vol. 235 Deeds, Page 390; thence N 89 degrees 41' 24" E along the north line of said lands a distance of 47.70 feet; thence S 0 degrees 21' 10" W a distance of 8.41 feet, being the Point of Beginning; thence N 89 degrees 41' 24" E a distance of 74.78 feet; thence S 0 degrees 21' 10" W a distance of 303.57 feet; thence S 52 degrees 50' 54" W a distance of 24.08 feet; thence N 89 degrees 06' 50" W a distance of 24.90 feet; thence N 72 degrees 10' 27" W a distance of 32.26 feet; thence N 0 degrees 21' 10" E a distance of 307.45 feet to the Point of Beginning. Containing 0.54 acres of land more or less. Subject to all easements and rights-of-way of record.

Parcel 2: Commencing at the Northwest corner of lands as described in Vol. 235 Deeds, Page 390; thence N 0 degrees 18' 36" W along the extension of the east line of Outlot 118, a distance of 26.64 feet, being the Point of Beginning; thence S 87 degrees 00' 25" W a distance of 66.44 feet; thence N 0 degrees 13' 58" W a distance of 115.28 feet; thence S 88 degrees 17' 10" E a distance of 66.26 feet to the said extension of the east line of Outlot 118; thence S 0 degrees 18' 36" E a distance of 109.83 feet to the Point of Beginning. Containing 0.17 acres of land more or less. Subject to all easements and rights-of-way of record.

3. That the parcels were previously used for wastewater treatment and disposal operations by a metal finishing manufacturing facility. A remedial action plan to address environmental concerns has been implemented at these sites. The plan has been reviewed by the Wisconsin Department of Natural Resources and a record of decision is pending.

4. The purpose of this Affidavit is to make the aforementioned facts a matter of public record.

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Further affiant saith not.

Dated this 24th day of August, 1987.

C. E. Hughes
C. E. Hughes
Vice President - Administration

Subscribed and sworn to
before me this 24th day
of August, 1987.

J. J. Wesselberg
Notary Public
State of Wisconsin, County of Monroe
My Commission 1-10-88

Instrument Drafted By:

Attorney Robert P. Smyth
P.O. Box 1567
La Crosse, WI 54602-1567

Consent Order signed Sept. 10, 1985

equity against any person, firm, partnership or corporation not a signatory to this Consent Order from any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any materials or hazardous substances at, to or from the site. This Consent Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA. The parties to this Consent Order expressly reserve all rights (including any right to contribution possessed by NEC and/or NECO, and/or against any other parties who may be responsible for actual or threatened releases at the site), claims, demands and causes of action they have or may have against any and all other persons and entities who are not parties to this Consent Order. NEC and/or NECO agrees to indemnify and save and hold harmless the U.S. EPA and WDNR from any and all claims or causes of action arising from acts or omissions of NEC and/or NECO in carrying out the activities pursuant to this Consent Order. U.S. EPA and WDNR are not a party in any contract involving NEC or NECO at the NEC site.

The U.S. EPA and WDNR shall not be held liable under or as a party to any contract entered into by NEC in carrying out the activities pursuant to this Consent Order.

XI. Deed Notice, Land Use and Conveyance of Title

NEC agrees not to use any portion of the NEC site in any manner which would adversely affect the integrity of any containment system, or monitoring system installed pursuant to this Consent Order. A copy of this Consent Order shall be recorded in the Register of Deeds office for Monroe County, Wisconsin, with

the deed for the NEC site.

No conveyance of title, easement or other interest in any portion of the NEC site shall be consummated by NEC without provision for continued operation and maintenance of any containment system, and monitoring system installed pursuant to this Consent Order. NEC shall notify U.S. EPA and WDNR by registered mail at least ninety (90) days prior to any conveyance of NEC's intent to convey any interest in land which comprises the NEC site and of the provision made for continued maintenance of the system.

XII. Other Applicable Laws

All actions required to be taken pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable local, State and Federal laws and regulations.

XIII. Reimbursement of Cost

Within 10 days of the approval of this Consent Order in accordance with the provisions of Paragraph XIV of this Order the U.S. EPA will provide NEC with an itemized statement of the U.S. EPA expenditures as of the date of such approval. NEC shall Pay into the Hazardous Substance Response Fund the sum demanded by the U.S. EPA as reimbursement of U.S. EPA's expenditures (payment to be forwarded to the U.S. EPA, Region V, Regional Hearing Clerk, 230 South Dearborn, Chicago, Illinois, 60604). The amount demanded by the U.S. EPA shall not exceed \$10,000. Payment of this sum shall be in full and complete satisfaction of all past monetary claims of U.S. EPA for expenditures made prior to the execution of this Consent Order.

Five-Year Review Site Inspection Checklist (Template)

| I. SITE INFORMATION | | | | | | | | | | | | | |
|--|--|--|--|---|--|--|---|---|--|---|--|--------------------------------------|--|
| Site name: <u>Northern Engraving</u> | Date of inspection: <u>4/11/05</u> | | | | | | | | | | | | |
| Location and Region: <u>Sparta, WI R5</u> | EPA ID: <u>WI D006183826</u> | | | | | | | | | | | | |
| Agency, office, or company leading the five-year review: <u>WDNR, G. Edelstein</u> | Weather/temperature: <u>Cloudy, 68°F</u> | | | | | | | | | | | | |
| Remedy Includes: (Check all that apply) <table border="0"> <tr> <td><input checked="" type="checkbox"/> Landfill cover/containment</td> <td><input type="checkbox"/> Monitored natural attenuation</td> </tr> <tr> <td><input checked="" type="checkbox"/> Access controls</td> <td><input type="checkbox"/> Groundwater containment</td> </tr> <tr> <td><input checked="" type="checkbox"/> Institutional controls</td> <td><input type="checkbox"/> Vertical barrier walls</td> </tr> <tr> <td><input type="checkbox"/> Groundwater pump and treatment</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Surface water collection and treatment</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> | | <input checked="" type="checkbox"/> Landfill cover/containment | <input type="checkbox"/> Monitored natural attenuation | <input checked="" type="checkbox"/> Access controls | <input type="checkbox"/> Groundwater containment | <input checked="" type="checkbox"/> Institutional controls | <input type="checkbox"/> Vertical barrier walls | <input type="checkbox"/> Groundwater pump and treatment | | <input type="checkbox"/> Surface water collection and treatment | | <input type="checkbox"/> Other _____ | |
| <input checked="" type="checkbox"/> Landfill cover/containment | <input type="checkbox"/> Monitored natural attenuation | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Access controls | <input type="checkbox"/> Groundwater containment | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Institutional controls | <input type="checkbox"/> Vertical barrier walls | | | | | | | | | | | | |
| <input type="checkbox"/> Groundwater pump and treatment | | | | | | | | | | | | | |
| <input type="checkbox"/> Surface water collection and treatment | | | | | | | | | | | | | |
| <input type="checkbox"/> Other _____ | | | | | | | | | | | | | |
| Attachments: <input type="checkbox"/> Inspection team roster attached <input checked="" type="checkbox"/> Site map attached | | | | | | | | | | | | | |
| II. INTERVIEWS (Check all that apply) | | | | | | | | | | | | | |
| 1. O&M site manager <u>Darrell Zietlow</u> <u>Water Qual Mgr.</u> <u>4/11/05</u> <div style="display: flex; justify-content: space-between;"> Name Title Date </div> Interviewed <input checked="" type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. <u>608-269-6911 ext. 368</u> Problems, suggestions; G Report attached _____ | | | | | | | | | | | | | |
| 2. O&M staff _____ <div style="display: flex; justify-content: space-between;"> Name Title Date </div> Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____ Problems, suggestions; G Report attached _____ | | | | | | | | | | | | | |

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency _____
 Contact _____

| Name | Title | Date | Phone no. |
|--|-------|------|-----------|
| Problems; suggestions; G Report attached _____ | | | |

Agency _____
 Contact _____

| Name | Title | Date | Phone no. |
|--|-------|------|-----------|
| Problems; suggestions; G Report attached _____ | | | |

Agency _____
 Contact _____

| Name | Title | Date | Phone no. |
|--|-------|------|-----------|
| Problems; suggestions; G Report attached _____ | | | |

Agency _____
 Contact _____

| Name | Title | Date | Phone no. |
|--|-------|------|-----------|
| Problems; suggestions; G Report attached _____ | | | |

4. **Other interviews (optional)** G Report attached.

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III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

| III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply) | | | | |
|--|---|--|--|--|
| 1. | O&M Documents <input checked="" type="checkbox"/> O&M manual <input type="checkbox"/> As-built drawings <input checked="" type="checkbox"/> Maintenance logs Remarks <i>Inspection log attached. Recommend fence condition be included in the future</i> | <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available | <input checked="" type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A |
| 2. | Site-Specific Health and Safety Plan <input type="checkbox"/> Contingency plan/emergency response plan Remarks _____ | <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A |
| 3. | O&M and OSHA Training Records Remarks _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| 4. | Permits and Service Agreements <input type="checkbox"/> Air discharge permit <input type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits Remarks _____ | <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A |
| 5. | Gas Generation Records Remarks _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| 6. | Settlement Monument Records Remarks _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| 7. | Groundwater Monitoring Records Remarks <i>Site ceased groundwater monitoring in 2000</i> | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| 8. | Leachate Extraction Records Remarks _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| 9. | Discharge Compliance Records <input type="checkbox"/> Air <input type="checkbox"/> Water (effluent) Remarks _____ | <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A |
| 10. | Daily Access/Security Logs Remarks _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |

| IV. O&M COSTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|------------|---|--|--|--|--|------|------|------------|--|--|---|------------|----------|--|--|--|--|------|------|------------|--|--|---|------------|----------|--|--|--|--|------|------|------------|--|--|---|------------|----------|--|--|--|--|------|------|------------|--|--|---|------------|----------|--|--|--|--|------|------|------------|--|--|---|
| 1. | O&M Organization <input type="checkbox"/> State in-house <input checked="" type="checkbox"/> PRP in-house <input type="checkbox"/> Federal Facility in-house <input type="checkbox"/> Other _____ | <input type="checkbox"/> Contractor for State <input type="checkbox"/> Contractor for PRP <input type="checkbox"/> Contractor for Federal Facility | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | O&M Cost Records <input type="checkbox"/> Readily available <input type="checkbox"/> Up to date N/A <input type="checkbox"/> Funding mechanism/agreement in place Original O&M cost estimate _____ <input type="checkbox"/> Breakdown attached <div style="text-align: center;">Total annual cost by year for review period if available</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">From _____</td> <td style="width: 20%;">To _____</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> <td></td> <td><input type="checkbox"/> Breakdown attached</td> </tr> </table> | | | From _____ | To _____ | | | | | Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | From _____ | To _____ | | | | | Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | From _____ | To _____ | | | | | Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | From _____ | To _____ | | | | | Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | From _____ | To _____ | | | | | Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached |
| From _____ | To _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From _____ | To _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From _____ | To _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From _____ | To _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From _____ | To _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Date | Total cost | | | <input type="checkbox"/> Breakdown attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | Unanticipated or Unusually High O&M Costs During Review Period Describe costs and reasons: _____ _____ _____ _____ _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V. ACCESS AND INSTITUTIONAL CONTROLS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. Fencing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | Fencing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Location shown on site map Remarks <u>Fencing was undamaged</u> | <input type="checkbox"/> Gates secured | <input type="checkbox"/> N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Other Access Restrictions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | Signs and other security measures Remarks _____ | <input type="checkbox"/> Location shown on site map | <input checked="" type="checkbox"/> N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

C. Institutional Controls (ICs)**1. Implementation and enforcement**

Site conditions imply ICs not properly implemented

G Yes ☒ No ☒ G N/A

Site conditions imply ICs not being fully enforced

G Yes ☒ No ☒ G N/AType of monitoring (e.g., self-reporting, drive by) on-site inspectionsFrequency Yearly - Insp log attachedResponsible party/agency Northern EngravingContact D. Zetlow

Name

Title

Date

Phone no.

Reporting is up-to-date

G Yes ☐ G No ☒ N/A

Reports are verified by the lead agency

G Yes ☐ G No ☒ N/A

Specific requirements in deed or decision documents have been met

☒ Yes ☐ G No ☐ G N/A

Violations have been reported

G Yes ☐ G No ☒ N/AOther problems or suggestions: ☒ Report attachedcopy of Deed Affidavit attached**2.****Adequacy**☒ ICs are adequate☐ ICs are inadequate☐ N/ARemarks Deed Affidavit should provide adequate notice of site conditions to future property owners**D. General****1.****Vandalism/trespassing**☐ Location shown on site map☒ No vandalism evident

Remarks

2.**Land use changes on site**☒ N/A

Remarks

3.**Land use changes off site**☒ N/A

Remarks

VI. GENERAL SITE CONDITIONS**A. Roads**☐ Applicable☐ N/A**1.****Roads damaged**☐ Location shown on site map☒ Roads adequate☐ N/A

Remarks

| | | | |
|---|---|---|--|
| B. Other Site Conditions | | | |
| Remarks _____ | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| _____ | | | |
| VII. LANDFILL COVERS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A | | | |
| A. Landfill Surface <i>Solidified material landfill has composite cover</i> | | | |
| 1. | Settlement (Low spots) Areal extent _____ Depth _____ Remarks _____ | <input type="checkbox"/> Location shown on site map Depth _____ | <input checked="" type="checkbox"/> Settlement not evident |
| 2. | Cracks Lengths _____ Widths _____ Depths _____ Remarks _____ | <input type="checkbox"/> Location shown on site map | <input checked="" type="checkbox"/> Cracking not evident |
| 3. | Erosion Areal extent _____ Remarks _____ | <input type="checkbox"/> Location shown on site map Depth _____ | <input checked="" type="checkbox"/> Erosion not evident |
| 4. | Holes Areal extent _____ Remarks _____ | <input type="checkbox"/> Location shown on site map Depth _____ | <input checked="" type="checkbox"/> Holes not evident |
| 5. | Vegetative Cover <input checked="" type="checkbox"/> Grass <input checked="" type="checkbox"/> Cover properly established <input checked="" type="checkbox"/> No signs of stress G Trees/Shrubs (indicate size and locations on a diagram) Remarks _____ | | |
| 6. | Alternative Cover (armored rock, concrete, etc.) <input checked="" type="checkbox"/> N/A Remarks _____ | | |
| 7. | Bulges Areal extent _____ Remarks _____ | <input type="checkbox"/> Location shown on site map Height _____ | <input checked="" type="checkbox"/> Bulges not evident |

| | | |
|--|--|--|
| 8. | Wet Areas/Water Damage <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade Remarks _____ | <input checked="" type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____ |
| 9. | Slope Instability Areal extent _____ Remarks _____ | <input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No evidence of slope instability |
| B. Benches <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.) | | |
| 1. | Flows Bypass Bench Remarks _____ | <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> N/A or okay |
| 2. | Bench Breached Remarks _____ | <input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay |
| 3. | Bench Overtopped Remarks _____ | <input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay |
| C. Letdown Channels <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.) | | |
| 1. | Settlement Areal extent _____ Depth _____ Remarks _____ | <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of settlement |
| 2. | Material Degradation Material type _____ Areal extent _____ Remarks _____ | <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of degradation |
| 3. | Erosion Areal extent _____ Depth _____ Remarks _____ | <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of erosion |

| | | | |
|--|--|---|--|
| 4. | Undercutting | <input type="checkbox"/> Location shown on site map | <input type="checkbox"/> No evidence of undercutting |
| | Areal extent _____ | Depth _____ | |
| | Remarks _____ | | |
| 5. | Obstructions | Type _____ | <input type="checkbox"/> No obstructions |
| | <input type="checkbox"/> Location shown on site map | Areal extent _____ | |
| | Size _____ | | |
| | Remarks _____ | | |
| 6. | Excessive Vegetative Growth | Type _____ | |
| | <input checked="" type="checkbox"/> No evidence of excessive growth | | |
| | <input type="checkbox"/> Vegetation in channels does not obstruct flow | | |
| | <input type="checkbox"/> Location shown on site map | Areal extent _____ | |
| | Remarks _____ | | |
| D. Cover Penetrations <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A <i>Cover drainage cleanouts in good cond.</i> | | | |
| 1. | Gas Vents | <input type="checkbox"/> Active | <input type="checkbox"/> Passive |
| | <input type="checkbox"/> Properly secured/locked | <input type="checkbox"/> Functioning | <input type="checkbox"/> Routinely sampled |
| | <input type="checkbox"/> Evidence of leakage at penetration | | <input type="checkbox"/> Good condition |
| | | | <input type="checkbox"/> Needs Maintenance |
| | <input checked="" type="checkbox"/> N/A | | |
| | Remarks _____ | | |
| 2. | Gas Monitoring Probes | | |
| | <input type="checkbox"/> Properly secured/locked | <input type="checkbox"/> Functioning | <input type="checkbox"/> Routinely sampled |
| | <input type="checkbox"/> Evidence of leakage at penetration | | <input type="checkbox"/> Good condition |
| | | <input type="checkbox"/> Needs Maintenance | <input checked="" type="checkbox"/> N/A |
| | Remarks _____ | | |
| 3. | Monitoring Wells (within surface area of landfill) | | |
| | <input type="checkbox"/> Properly secured/locked | <input type="checkbox"/> Functioning | <input type="checkbox"/> Routinely sampled |
| | <input type="checkbox"/> Evidence of leakage at penetration | | <input type="checkbox"/> Good condition |
| | | <input type="checkbox"/> Needs Maintenance | <input checked="" type="checkbox"/> N/A |
| | Remarks _____ | | |
| 4. | Leachate Extraction Wells | | |
| | <input type="checkbox"/> Properly secured/locked | <input type="checkbox"/> Functioning | <input type="checkbox"/> Routinely sampled |
| | <input type="checkbox"/> Evidence of leakage at penetration | | <input type="checkbox"/> Good condition |
| | | <input type="checkbox"/> Needs Maintenance | <input checked="" type="checkbox"/> N/A |
| | Remarks _____ | | |
| 5. | Settlement Monuments | <input type="checkbox"/> Located | <input type="checkbox"/> Routinely surveyed |
| | <input checked="" type="checkbox"/> N/A | | |
| | Remarks _____ | | |

| | | | |
|---|---|--|---|
| E. Gas Collection and Treatment | | <input type="checkbox"/> Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Gas Treatment Facilities <input type="checkbox"/> Flaring <input type="checkbox"/> Thermal destruction <input type="checkbox"/> Collection for reuse <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ | | |
| 2. | Gas Collection Wells, Manifolds and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ | | |
| 3. | Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings) <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ | | |
| F. Cover Drainage Layer | | <input checked="" type="checkbox"/> Applicable | <input type="checkbox"/> N/A |
| 1. | Outlet Pipes Inspected <input checked="" type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks <u>Tested in spring with water to see if flowing correctly</u> | | |
| 2. | Outlet Rock Inspected <input type="checkbox"/> Functioning <input checked="" type="checkbox"/> N/A Remarks _____ | | |
| G. Detention/Sedimentation Ponds | | <input type="checkbox"/> Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Siltation Areal extent _____ Depth _____ <input type="checkbox"/> N/A <input type="checkbox"/> Siltation not evident Remarks _____ | | |
| 2. | Erosion Areal extent _____ Depth _____ <input type="checkbox"/> Erosion not evident Remarks _____ | | |
| 3. | Outlet Works <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ | | |
| 4. | Dam <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ | | |

| | | | | |
|--|-----------------------------------|------------------------------|---------------------------|---|
| H. Retaining Walls | | | G Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Deformations | G Location shown on site map | G Deformation not evident | |
| | Horizontal displacement_____ | Vertical displacement_____ | | |
| | Rotational displacement_____ | | | |
| | Remarks_____ | | | |
| 2. | Degradation | G Location shown on site map | G Degradation not evident | |
| | Remarks_____ | | | |
| I. Perimeter Ditches/Off-Site Discharge | | | G Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Siltation | G Location shown on site map | G Siltation not evident | |
| | Areal extent_____ | Depth_____ | | |
| | Remarks_____ | | | |
| 2. | Vegetative Growth | G Location shown on site map | G N/A | |
| | G Vegetation does not impede flow | | | |
| | Areal extent_____ | Type_____ | | |
| | Remarks_____ | | | |
| 3. | Erosion | G Location shown on site map | G Erosion not evident | |
| | Areal extent_____ | Depth_____ | | |
| | Remarks_____ | | | |
| 4. | Discharge Structure | G Functioning | G N/A | |
| | Remarks_____ | | | |
| VIII. VERTICAL BARRIER WALLS | | | G Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Settlement | G Location shown on site map | G Settlement not evident | |
| | Areal extent_____ | Depth_____ | | |
| | Remarks_____ | | | |
| 2. | Performance Monitoring | Type of monitoring_____ | | |
| | G Performance not monitored | | | |
| | Frequency_____ | G Evidence of breaching | | |
| | Head differential_____ | | | |
| | Remarks_____ | | | |

| | | | |
|---|--|-------------------------------------|---|
| IX. GROUNDWATER/SURFACE WATER REMEDIES | | <input type="checkbox"/> Applicable | <input checked="" type="checkbox"/> N/A |
| A. Groundwater Extraction Wells, Pumps, and Pipelines | | <input type="checkbox"/> Applicable | <input type="checkbox"/> N/A |
| 1. | Pumps, Wellhead Plumbing, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____ _____ | | |
| 2. | Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____ | | |
| 3. | Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____ _____ | | |
| B. Surface Water Collection Structures, Pumps, and Pipelines | | <input type="checkbox"/> Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Collection Structures, Pumps, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____ | | |
| 2. | Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____ | | |
| 3. | Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____ _____ | | |

| | | | |
|-------------------------------|--|--------------|---|
| C. Treatment System | | G Applicable | <input checked="" type="checkbox"/> N/A |
| 1. | Treatment Train (Check components that apply) G Metals removal G Oil/water separation G Bioremediation G Air stripping G Carbon adsorbers G Filters _____ G Additive (e.g., chelation agent, flocculent) _____ G Others _____ G Good condition G Needs Maintenance G Sampling ports properly marked and functional G Sampling/maintenance log displayed and up to date G Equipment properly identified G Quantity of groundwater treated annually _____ G Quantity of surface water treated annually _____ Remarks _____ _____ | | |
| 2. | Electrical Enclosures and Panels (properly rated and functional) G N/A G Good condition G Needs Maintenance Remarks _____ _____ | | |
| 3. | Tanks, Vaults, Storage Vessels G N/A G Good condition G Proper secondary containment G Needs Maintenance Remarks _____ _____ | | |
| 4. | Discharge Structure and Appurtenances G N/A G Good condition G Needs Maintenance Remarks _____ _____ | | |
| 5. | Treatment Building(s) G N/A G Good condition (esp. roof and doorways) G Needs repair G Chemicals and equipment properly stored Remarks _____ _____ | | |
| 6. | Monitoring Wells (pump and treatment remedy) G Properly secured/locked G Functioning G Routinely sampled G Good condition G All required wells located G Needs Maintenance G N/A Remarks _____ _____ | | |
| D. Monitoring Data N/A | | | |
| 1. | Monitoring Data G Is routinely submitted on time G Is of acceptable quality | | |
| 2. | Monitoring data suggests: G Groundwater plume is effectively contained G Contaminant concentrations are declining | | |

| | | | |
|--|--|--|--|
| D. Monitored Natural Attenuation <u>N/A</u> | | | |
| 1. | Monitoring Wells (natural attenuation remedy) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells located <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____ _____ | | |
| X. OTHER REMEDIES | | | |
| If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction. | | | |
| XI. OVERALL OBSERVATIONS | | | |
| A. Implementation of the Remedy | | | |
| Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). <u>Cover over consolidated wastes area appears to be</u> <u>in good condition and cover drainage system</u> <u>functional. Fencing in good condition, access</u> <u>controls adequate. Photographs taken on day of</u> <u>inspection attached.</u> | | | |
| B. Adequacy of O&M | | | |
| Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <u>Inspection logs adequate. Cover appears to be</u> <u>properly maintained. Fence maintenance</u> <u>should be added to inspection logs</u> | | | |

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

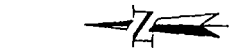
Fence inspection & maintenance activities should be
added to the maintenance logs.

Note: Slide location map and 16
slide photos taken at the
inspection are part of this
form.

4/11/05
SITE INSPECTION
PHOTO KEY

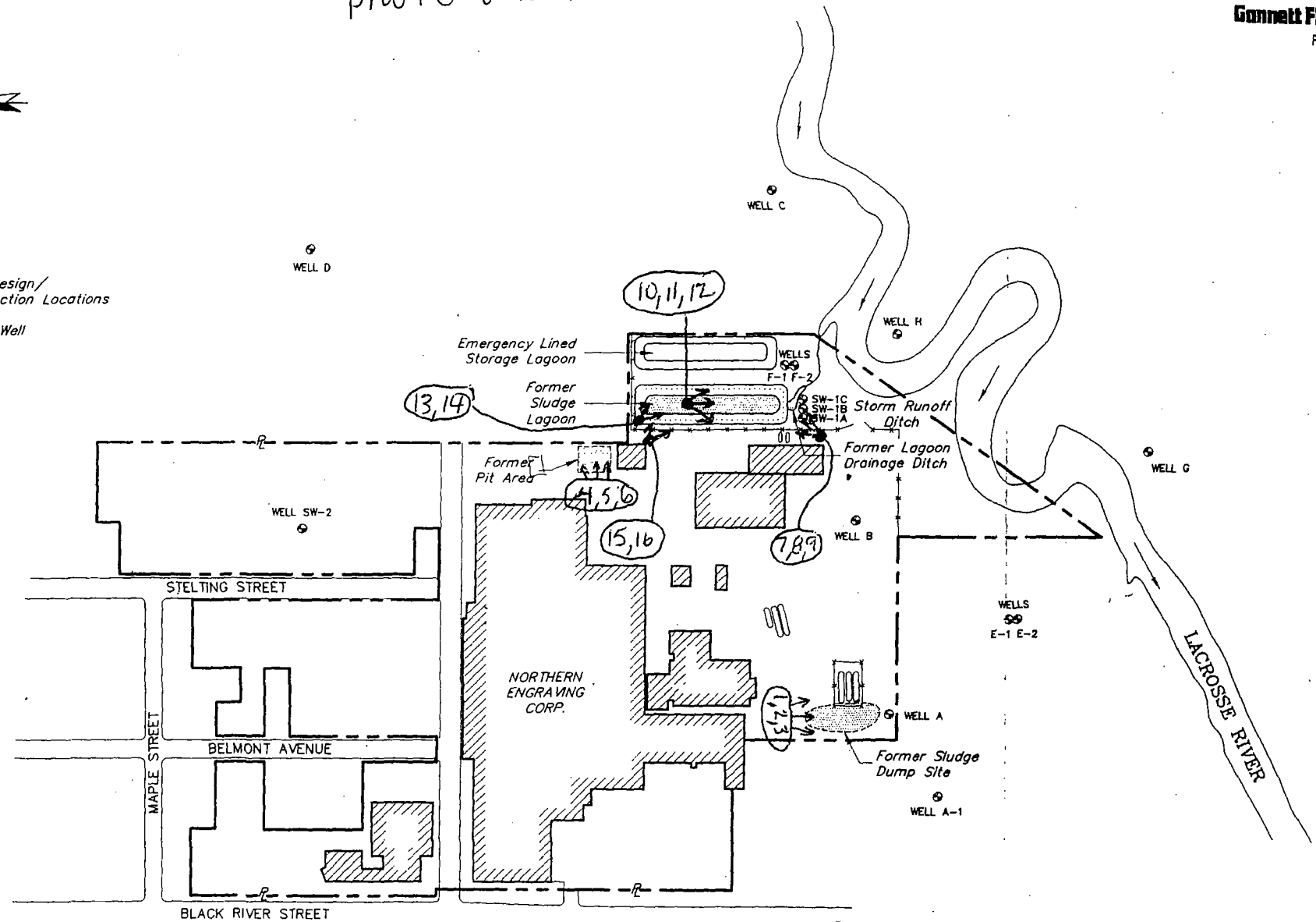
Arrows show direction
photo was taken

Gannett Fleming
FIGURE 1



LEGEND

- Remedial Design/
Remedial Action Locations
- Monitoring Well
- Fence



0 200
Scale In Feet

Superfund Site, Record of Inspections

| Date of Inspection | Sludge Lagoon | Drainage Ditch | Seepage Pit | Sludge Dumpsite |
|--------------------|--|-------------------------------|-------------------------------|-------------------------------|
| 4/10/01 | Cap in good condition, drainage system working | grass cover in good condition | grass cover in good condition | grass cover in good condition |
| 7/20/01 | remaining wells were abandoned, except for SW 1A which is used for another remediation project | grass cover in good cond. | grass cover in good condition | grass cover in good condition |
| 3/22/02 | grass cover in good condition, drainage system working | grass cover in good cond. | grass cover in good condition | grass cover in good condition |
| 4/21/03 | cover good, drainage system working after heavy rain | grass cover in good cond. | grass cover in good condition | grass cover in good condition |
| 3/29/04 | grass cover good, drainage sys. working after rain | grass cover in good condition | grass cover in good condition | grass cover in good condition |
| 4/7/05 | grass cover in good condition, drainage system tested with hose, OK | grass cover good | grass cover good | grass cover good |
| | | | | |

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